

REMARKS

Claims 1, 3-5, 7, 9, 10, 12, 14 and 16-19 have been amended. Claims 2, 6, 8, 11 and 13 have been canceled. Claims 1, 3-5, 7, 9, 10, 12 and 14-19 (fourteen claims) remain pending in the application following this Amendment. Applicants respectfully request further examination of the application, as amended.

Rejection of Claims 1-3, 5-8 and 10-19 Under 35 U.S.C. § 103

Claims 1-3, 5-8 and 10-19 are rejected under 35 U.S.C. § 102 (e) as being anticipated by Muhonen et al. (U.S. Patent Application Publication No. 2005/0014500 A1).

In the Final Office Action, the Examiner responded by disagreeing with Applicants' argument that an IMSI of a target UE is not within the scope of meaning of the term "temporary dialable number" as that term is used in Applicants' claims. Applicants respectfully submit the following remarks with regard to this issue and others.

With regard to the issue of whether an IMSI is a "temporary dialable number" that is used, as recited in Applicants' claims, to obtain the identity of the foreign-technology equipment serving the wireless device, the Examiner points out that Muhonen et al. discloses: "The HRL part of the HRL/HSS 40 may access the HSS part based on an internetworking function to obtain the IMSI or any other cellular Identity of the target UE from the HSS part based on a corresponding mapping function." (Muhonen, ¶ 45, lines 17-21.) Elsewhere in Muhonen et al. it is noted that the term "cellular Identity" can include not only an IMSI but also a MSISDN. (See Muhonen, ¶ 47, line 15.) An IMSI and a MSISDN are the only examples of a "cellular Identity" that Muhonen et al. gives. Therefore, although Muhonen et al. uses the phrase "the IMSI or any other cellular Identity," Muhonen et al. does not provide a definition for the term "cellular Identity" but rather defines the term only by mentioning two examples—IMSI and MSISDN. It is well known that both an IMSI and a MSISDN are tied to a UE at provisioning time (i.e., prior to use of the UE) and are in no sense of the word "temporary." They do not change from one telephone call (or other instance of use of the network) to the next. Applicants

respectfully submit that no person skilled in the art would reasonably consider an IMSI or MSISDN to be “temporary.”

In addition to provisioned (i.e., non-temporary) IMSI or MSISDN numbers, temporary dialable numbers are indeed also known in the art. A TMSI or Temporary Mobile Subscriber Identity is similar to an IMSI but transmitted by the UE in place of the IMSI to minimize the number of times the IMSI is exposed to undesired interception by potentially unscrupulous parties. The very fact that the terms TMSI and IMSI are both used in the art clearly demonstrates that one is considered temporary while the other is not. If an IMSI were considered temporary, then why would the art need a separate term (TMSI) that further includes the word “Temporary”? In other words, since a TMSI is, by definition, temporary, then it logically follows that an IMSI is not temporary. Similarly, under the applicable standards (e.g., GAIT) that form the background against which the present invention is set, it has been described that a Temporary Local Directory Number (TLDN) can be a type of “temporary dialable number.” In other words, while temporary numbers do exist in the art, the numbers to which Muhonen et al. refers are not such temporary numbers. In summary, nothing in Muhonen et al. suggests that the “cellular Identity” mentioned therein can be anything other than a provisioned or essentially permanently associated number (permanently associated with a particular UE) such as an IMSI or MSISDN; nothing suggests that it can be a temporary dialable number that is only temporarily associated with a UE for the duration of a call or other instance of network use.

In addition, Applicants also respectfully submit that the manner in which the claims are structured prevents the IMSI to which Muhonen et al. refers from logically being interpreted as the temporary dialable number recited in Applicants’ claims. Applicants’ claims recite using a “conversion element” to provide the temporary dialable number, and then using the temporary dialable number to obtain the identity of the serving equipment (and in turn, in some instances, allowing the location of the UE to be obtained from the serving equipment). Muhonen et al. teaches that the HLR/HSS (which the Examiner interprets as a “conversion element”) returns “the cellular identity

(e.g., MSI) of the target UE 10 and a routing information (address of the serving network element) required for routing the LSC [location] service request in the cellular network (step 3).” (Muhonen, ¶ 46, lines 13-17.) In other words, in Muhonen et al., the HLR/HSS is used to obtain both the “cellular identity” (IMSI) of the UE and the identity of the serving equipment (so that the UE location request can in turn be sent to the serving equipment). In contrast with Applicants’ claims, there is no conversion element that is used to obtain a number that is then, in turn, used to obtain the identity of the serving equipment. Rather, in Muhonen et al., the HLR/HSS is used to obtain both the IMSI and the identity (address) of the serving equipment. The IMSI, if interpreted as a “temporary dialable number,” is not used, in turn, to obtain the identity of the serving equipment.

Moreover, and perhaps tying the above together, the claims recite that the response from the subscriber information database is examined to determine whether the database lookup has provided the identity of the actual serving equipment or whether it has instead provided the identity of the network conversion element. Applicant respectfully points out that perhaps the Examiner has not afforded sufficient weight to this recitation in the claims. It should be noted that a determination is made as to which one of these two items the subscriber database lookup has returned, and if the result of that determination is that the identity of the network conversion element has been returned, then the temporary dialable number is requested from the conversion element. (If a network conversion element identity is not returned, then the query can be handled based upon the default or normal scenario in which the wireless device is not roaming on a foreign-technology network.) Applicants submit that the HLR/HSS in Muhonen et al. cannot be interpreted as a “conversion element” because no such determination is apparently made, and the action that is taken is not chosen in response to any such determination. Rather, in Muhonen et al. the HLR/HSS apparently in every instance provides the UE “cellular Identity” (e.g., IMSI or MSISDN) and the address (location) of the serving network equipment. In Applicants’ invention, the conversion element only provides a temporary dialable number if the subscriber database has not

provided the identity of actual serving equipment but rather has instead provided the identity of a network conversion element (from which, in turn, the identity of the serving equipment can be determined). Muhonen et al.'s IMSI is not only not a temporary dialable number but also is not obtained in this conditional manner.

For at least the reasons discussed above, Applicants respectfully request reconsideration and withdrawal of this rejection.

In addition, with regard to claims 3, 5, 10, 12, 15, 17 and 19, Muhonen et al. does not disclose a temporary dialable number database. The Examiner states that, with regard to these claims, the HLR/HSS of Muhonen et al. is a "temporary dialable number database," since it provides the IMSI. However, the Examiner previously stated, as discussed above, that with regard to the claims from which these claims depend the HLR/HSS is the "conversion element." Applicants respectfully submit that the HLR/HSS cannot be both a conversion element and a temporary dialable number database, as these are recited in Applicants' claims in the form of two separate elements or steps.

With regard to claims 10 and 19, Muhonen et al. does not disclose utilizing a temporary dialable number database to cross reference a temporary dialable number with the type of technology of the serving equipment, which corresponds to the type of technology in which the multi-technology wireless device is operating. Although Muhonen et al. discloses a UE 10 that apparently can operate in both a UTRAN mode and a GERAN mode, Muhonen et al. does not disclose anything to the effect that the HLR/HSS (which the Examiner contends is a temporary dialable number database) is used to cross reference an IMSI or other number stored therein with a technology type such as the mentioned UTRAN or GERAN networks.

Rejection of Claims 4 and 9 under 35 U.S.C. §103(a)

Claims 4 and 9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Muhonen et al. in view of Naghian et al. (U.S. Patent Application Publication No. 2003/0148774 A1).

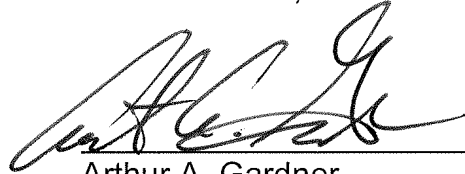
Applicants respectfully traverse this rejection for at least the same reasons discussed above with regard to the claims from which claims 4 and 9 depend. Naghian

et al. relates to locating a wireless device within a network with a desired level of accuracy. Nevertheless, it does not teach or suggesting using a temporary dialable number to determine the identity of the equipment serving the device, such that a location request reflecting the desired accuracy can be formatted to suit the identified foreign technology of the equipment that is serving the device. Naghian et al. teaches formatting the location request to reflect the desired level of accuracy, but does not teach formatting the location request to suit the technology associated with the identified serving equipment. Absent any teaching in either Muhonen et al. or Naghian et al. of this limitation, the invention as claimed in claims 4 and 9 could not have been obvious to a person of ordinary skill in the art in view of the combination of references. For at least this reason, Applicants respectfully request reconsideration and withdrawal of this rejection.

CONCLUSION

In view of the amendments submitted herein and the above comments, it is believed that all grounds of rejection are overcome and that the application has now been placed in full condition for allowance. Accordingly, the Applicant requests early and favorable action. Should there be any further questions, the Examiner is urged to telephone the Applicant's undersigned attorney at (770) 984-2300.

Respectfully submitted,
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A handwritten signature in black ink, appearing to read 'Arthur A. Gardner', is written over a horizontal line.

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